

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/054,399

Source: 01PE

Date Processed by STIC: 9-16-0

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- 3. Hand Carry directly to:
 - U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Does Not Comply Corrected Diskette Needed



OIPE

RAW SEQUENCE LISTING DATE: 09/16/2002 PATENT APPLICATION: US/10/054,399 TIME: 10:54:29

Input Set : A:\pto_ms.txt

Output Set: N:\CRF4\09162002\J054399.raw

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             Nern, Peter MA
      5 <120> TITLE OF INVENTION: NUCLEOTIDE SEQUENCES AND PROTEIN SEQUENCES
      7 <130> FILE REFERENCE: DYOU13.1A2CP1
      9 <140> CURRENT APPLICATION NUMBER: 10/054399
C--> 10 <141> CURRENT FILING DATE: 2002-08-30
    12 <150> PRIOR APPLICATION NUMBER: 09/168,474
    13 <151> PRIOR FILING DATE: 1998-10-08
    15 <150> PRIOR APPLICATION NUMBER: 08/951,141
    16 <151> PRIOR FILING DATE: 1997-10-15
    18 <150> PRIOR APPLICATION NUMBER: 09/529,106
    19 <151> PRIOR FILING DATE: 2000-04-07
    21 <150> PRIOR APPLICATION NUMBER: US 09/732,180
    22 <151> PRIOR FILING DATE: 2000-12-07
    24 <150> PRIOR APPLICATION NUMBER: US 60/169,699
    25 <151> PRIOR FILING DATE: 1999-12-07
    27 <150> PRIOR APPLICATION NUMBER: PCT/GB98/03033
    28 <151> PRIOR FILING DATE: 1998-10-08
    30 <150> PRIOR APPLICATION NUMBER: 9812793.9
    31 <151> PRIOR FILING DATE: 1998-06-12
    33 <150> PRIOR APPLICATION NUMBER: 9721357.3
    34 <151> PRIOR FILING DATE: 1997-10-08
    36 <150> PRIOR APPLICATION NUMBER: 9721358.1
    37 <151> PRIOR FILING DATE: 1997-10-08
    39 <160> NUMBER OF SEO ID NOS: 37
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    43 <210> SEO ID NO: 1
    44 <211> LENGTH: 228
    45 <212> TYPE: DNA
    46 <213> ORGANISM: Saccharomyces cerevisiae
    48 <220> FEATURE:
    49 <223> OTHER INFORMATION:
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    53 gacgatttga aagtctgtaa aaaatccatt tatgacttta tattgggctg caagaaacac 120
    54 tttgcattta acgatgagga gcttttcact atatccgacg tttttgccaa ctcgacgtcc 180
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    58 <211> LENGTH: 76
    59 <212> TYPE: PRT
    60 <213> ORGANISM: Saccharomyces cerevisiae
    62 <220> FEATURE:
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DATE: 09/16/2002

TIME: 10:54:29

Input Set : A:\pto_ms.txt Output Set: N:\CRF4\09162002\J054399.raw The type of errors shown exist throughout the Sequence Listing. Please check subsequent 65 <400> SEQUENCE: 2 sequences for similar errors. 66 Pro Leu Cys Ile Leu Phe Asn Ser Val Lys Pro Gln Phe Lys Leu Pro 69 Val Ile Ala Ser Asp Asp Leu Lys Val Cys Lys Ser Ile Tyr Asp 70 25 72 Phe Ile Leu Gly Cys Lys Lys His Phe Ala Phe Asn Asp Glu Glu Leu 73 40 4.5 75 Phe Thr Ile Ser Asp Val Phe Ala Asn Ser Thr Ser Gln Leu Val Lys 55 need to explain the Source of the genetic Imaterial 60 78 Val Leu Glu Val Val Glu Thr Leu Met Asn Ser Ser 79 65 70 82 <210> SEQ ID NO: 3 83 <211> LENGTH: 228 84 <212> TYPE: DNA 85 <213> ORGANISM: Artificial Sequence 87 <220> FEATURE: 88 <223> OTHER INFORMATION: Description of Artificial Sequence: nucleic acid 90 <400> SEQUENCE: 3 91 cccctctgta tacttttcaa ctctgtgaag ccgcaattta aattaccggt aatagcattt 60 92 gacgatttga aagtctgtaa aaaatccatt tatgacttta tattgggctg caagaaacac 120 93 tttgcattta acgatgagga gcttttcact atatccgacg tttttgccaa ctcgacgtcc 180 94 cagctggtca aagtgctaga agtagtagaa acgctaatga attccagc 96 <210> SEQ ID NO: 4 97 <211> LENGTH: 76 98 <212> TYPE: PRT 99 <213> ORGANISM: Artificial Sequence 101 <220> FEATURE: 102 <223> OTHER INFORMATION: Description of Artificial Sequence: amino acid 104 <400> SEQUENCE: 4 105 Pro Leu Cys Ile Leu Phe Asn Ser Val Lys Pro Gln Phe Lys Leu Pro 106 5 108 Val Ile Ala Phe Asp Asp Leu Lys Val Cys Lys Lys Ser Ile Tyr Asp 109 20 111 Phe Ile Leu Gly Cys Lys Lys His Phe Ala Phe Asn Asp Glu Glu Leu 35 45 114 Phe Thr Ile Ser Asp Val Phe Ala Asn Ser Thr Ser Gln Leu Val Lys 55 117 Val Leu Glu Val Val Glu Thr Leu Met Asn Ser Ser 118 65 70 121 <210> SEQ ID NO: 5 122 <211> LENGTH: 228 123 <212> TYPE: DNA 124 <213> ORGANISM: Artificial Sequence 126 <220> FEATURE: 127 <223> OTHER INFORMATION: Description of Artificial Sequence: nucleic acid 129 <400> SEQUENCE: 5 130 cccctctgta tacttttcaa ctctgtgaag ccgcaattta aattaccggt aatagcatct 60

131 ggcgatttga aagtctgtaa aaaatccatt tatgacttta tattgggctg caagaaacac 120 132 tttgcattta acgatgagga gcttttcact atatccgacg tttttgccaa ctcgacgtcc 180

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/054,399

RAW SEQUENCE LISTING DATE: 09/16/2002 PATENT APPLICATION: US/10/054,399 TIME: 10:54:29

Input Set : A:\pto_ms.txt

Output Set: N:\CRF4\09162002\J054399.raw

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136 <211> LENGTH: 76
137 <212> TYPE: PRT
138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence: amino acid
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147 Val Ile Ala Ser Gly Asp Leu Lys Val Cys Lys Lys Ser Ile Tyr Asp
148
                 2.0
                                      25
150 Phe Ile Leu Gly Cys Lys Lys His Phe Ala Phe Asn Asp Glu Glu Leu
151
             35
                                  40
                                                      45
153 Phe Thr Ile Ser Asp Val Phe Ala Asn Ser Thr Ser Gln Leu Val Lys
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                              55
                                                  60
156 Val Leu Glu Val Val Glu Thr Leu Met Asn Ser Ser
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171 tttgcattta acgatgagga gettttcact atatccgacg tttttgccaa ctcgacgtcc 180
172 cagetggtea aagtgetaga agtagtagaa aegetaatga atteeage
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186 Val Ile Ala Pro Asp Asp Leu Lys Val Cys Lys Lys Ser Ile Tyr Asp
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189 Phe Ile Leu Gly Cys Lys Lys His Phe Ala Phe Asn Asp Glu Glu Leu
192 Phe Thr Ile Ser Asp Val Phe Ala Asn Ser Thr Ser Gln Leu Val Lys
                             55
195 Val Leu Glu Val Val Glu Thr Leu Met Asn Ser Ser
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199 <210> SEO ID NO: 9
200 <211> LENGTH: 392
201 <212> TYPE: PRT
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RAW SEQUENCE LISTING DATE: 09/16/2002 PATENT APPLICATION: US/10/054,399 TIME: 10:54:29

Input Set : A:\pto_ms.txt

Output Set: N:\CRF4\09162002\J054399.raw

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211 Leu Glu Ile Leu Asp Lys Tyr Arg Gln Gln Leu Leu Asp Ser Asn Leu
               20
214 Ile Thr Ser Glu Glu Leu Tyr Met Leu Phe Pro Asn Leu Gly Asp Ala
            35
                                40
                                                    4.5
217 Ile Asp Phe Gln Arg Arg Phe Leu Ile Ser Leu Glu Ile Asn Ala Leu
        50
                            55
220 Val Glu Pro Ser Lys Gln Arg Ile Gly Ala Leu Phe Met His Ser Lys
                        70
                                            75
223 His Phe Phe Lys Leu Tyr Glu Pro Trp Ser Ile Gly Gln Asn Ala Ala
                    8.5
                                        90
226 Ile Glu Phe Leu Ser Ser Thr Leu His Lys Met Arg Val Asp Glu Ser
               100
                                   105
229 Gln Arg Phe Ile Ile Asn Asn Lys Leu Glu Leu Gln Ser Phe Leu Tyr
230 115
                               120
                                                  125
232 Lys Pro Val Gln Arg Leu Cys Arg Tyr Pro Leu Leu Val Lys Glu Leu
233 130
                           135
                                               140
235 Leu Ala Glu Ser Ser Asp Asp Asn Asn Thr Lys Glu Leu Glu Ala Ala
                       150
                                           155
238 Leu Asp Ile Ser Lys Asn Ile Ala Arg Ser Ile Asn Glu Asn Gln Arg
                   165
                                       170
241 Arg Thr Glu Asn His Gln Val Val Lys Lys Leu Tyr Gly Arg Val Val
               180
                                   185
244 Asn Trp Lys Gly Tyr Arg Ile Ser Lys Phe Gly Glu Leu Leu Tyr Phe
          195
                               200
247 Asp Lys Val Phe Ile Ser Thr Thr Asn Ser Ser Ser Glu Pro Glu Arg
248 210
                           215
250 Glu Phe Glu Val Tyr Leu Phe Glu Lys Ile Ile Leu Phe Ser Glu
253 Val Val Thr Lys Lys Ser Ala Ser Ser Leu Ile Leu Lys Lys Ser
                   245
                                       250
256 Ser Thr Ser Ala Ser Ile Ser Ala Ser Asn Ile Thr Asp Asn Asn Gly
               260
                                   265
259 Ser Pro His His Ser Tyr His Lys Arg His Ser Asn Ser Ser Ser Ser
                               280
262 Asn Asn Ile His Leu Ser Ser Ser Ala Ala Ile Ile His Ser
                           295
                                               300
265 Ser Thr Asn Ser Ser Asp Asn Asn Ser Asn Ser Ser Ser Ser Ser
                       310
                                           315
268 Leu Phe Lys Leu Ser Ala Asn Glu Pro Lys Leu Asp Leu Arg Gly Arg
                   325
                                       330
271 Ile Met Ile Met Asn Leu Asn Gln Ile Ile Pro Gln Asn Asn Arg Ser
                                   345
274 Leu Asn Ile Thr Trp Glu Ser Ile Lys Glu Gln Gly Asn Phe Leu Leu
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RAW SEQUENCE LISTING DATE: 09/16/2002 PATENT APPLICATION: US/10/054,399 TIME: 10:54:29

Input Set : A:\pto_ms.txt

Output Set: N:\CRF4\09162002\J054399.raw

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355
                                360
275
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280 Gln Leu Ile His Asp Leu Lys Asn
281 385
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286 <212> TYPE: DNA
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294 ccacaaagtc tacaggatat ctctgcagtg gaggaagaaa ttcaaaataa aatagaggcc 120
295 gccagacaag agagtaaaca gcttcatgct caaataaata aagcaaaaca caagatacaa 180
296 gatgcaagct tattccagat ggccaacaaa gttacttcgt tgaccaaaaa taagatcaac 240
297 ttaaagccaa atatcgtgtt gaaaggccat aataataaaa tctcagattt tcggtggagt 300
298 cgagattcaa aacgtatttt gagtgcaagt caagatggct ttatgcttat atgggacagt 360
299 gcttcaggtt taaaacagaa cgctattcca ttagattctc aatgggttct ttcctgcgct 420
300 atttcgccat cgagtacttt ggtagcaagc gcaggattaa acaataactg taccatttat 480
301 agagtttcga aagaaaacag agtagcgcaa aacgttgcgt caattttcaa aggacatact 540
302 tqctatattt ctqacattqa atttacaqat aacqcacata tattqacaqc aagtggggat 600
303 atqacatqtq ccttqtqqqa tataccqaaa qcaaaqaqqq tqaqaqaata ttctqaccat 660
304 ttaggtgatg ttttggcatt agctattcct gaagagccaa acttagaaaa ttcttcgaac 720
305 acattegeta getgtggate agaegggtat acttacatat gggatageag ateteegtee 780
306 gctgtacaaa gcttttacgt taacgatagt gatattaatg cacttcgttt tttcaaagac 840
307 gggatgtcga ttgttgcagg aagtgacaat ggtgcgataa atatgtatga tttaaggtcg 900
308 gactgttcta ttgctacttt ttctcttttt cgaggttatg aagaacgtac ccctacccct 960
309 acttatatgg cagctaacat ggagtacaat accgcgcaat cgccacaaac tttaaaatca 1020
310 acaageteaa getatetaga caaceaagge gttgtttett tagattttag tgcatetgga 1080
311 agattgatgt actcatgcta tacagacatt ggttgtgttg tgtgggatgt attaaaagga 1140
312 gagattgttg gaaaattaga aggtcatggt ggcagagtca ctggtgtgcg ctcgagtcca 1200
313 gatgggttag ctgtatgtac aggttcatgg gactcaacca tgaaaatatg gtctccaggt 1260
314 tatcaatag
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328 Gln Tyr Ile Gln Pro Gln Ser Leu Gln Asp Ile Ser Ala Val Glu Glu
329
                 20
                                     2.5
331 Glu Ile Gln Asn Lys Ile Glu Ala Ala Arg Gln Glu Ser Lys Gln Leu
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334 His Ala Gln Ile Asn Lys Ala Lys His Lys Ile Gln Asp Ala Ser Leu
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335

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/054,399

DATE: 09/16/2002 TIME: 10:54:30

Input Set : A:\pto_ms.txt

Output Set: N:\CRF4\09162002\J054399.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the $\langle 220 \rangle$ to $\langle 223 \rangle$ fields of each sequence which presents at least one n or Xaa.

Seq#:32; N Pos. 12
Seq#:33; N Pos. 13

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/054,399

DATE: 09/16/2002

TIME: 10:54:30

Input Set : A:\pto_ms.txt

Output Set: N:\CRF4\09162002\J054399.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:1799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0 L:1816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0 L:1843 M:283 W: Missing Blank Line separator, <400> field identifier

VERIFICATION SUMMARY

DATE: 09/10/2002

PATENT APPLICATION: US/10/054,399

TIME: 08:57:09

Input Set : A:\DYOU13.1A2CP1 Seq listing.txt Output Set: N:\CRF3\09102002\J054399.raw

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L:1799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32

L:1816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33

L:1841 M:282 W: Numeric Field Identifier Missing, <211> is required.

L:1841 M:282 W: Numeric Field Identifier Missing, <212> is required.

L:1841 M:282 W: Numeric Field Identifier Missing, <213> is required. L:1841 M:200 E: Mandatory Header Field missing, <400> is required.

L:39 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (37) Counted (36)

Does Not Comply Corrected Diskette Needed



OIPE

RAW SEQUENCE LISTING

DATE: 09/10/2002

PATENT APPLICATION: US/10/054,399

TIME: 08:57:08

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              Nern, Peter MA
      5 <120> TITLE OF INVENTION: NUCLEOTIDE SEQUENCES AND PROTEIN SEQUENCES
      7 <130> FILE REFERENCE: DYOU13.1A2CP1
      9 <140> CURRENT APPLICATION NUMBER: 10/054399
C--> 10 <141> CURRENT FILING DATE: 2002-08-30
     12 <150> PRIOR APPLICATION NUMBER: 09/168,474
     13 <151> PRIOR FILING DATE: 1998-10-08
     15 <150> PRIOR APPLICATION NUMBER: 08/951,141
     16 <151> PRIOR FILING DATE: 1997-10-15
     18 <150> PRIOR APPLICATION NUMBER: 09/529,106
     19 <151> PRIOR FILING DATE: 2000-04-07
     21 <150> PRIOR APPLICATION NUMBER: US 09/732,180
     22 <151> PRIOR FILING DATE: 2000-12-07
    24 <150> PRIOR APPLICATION NUMBER: US 60/169,699
    25 <151> PRIOR FILING DATE: 1999-12-07
    27 <150> PRIOR APPLICATION NUMBER: PCT/GB98/03033
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    30 <150> PRIOR APPLICATION NUMBER: 9812793.9
    31 <151> PRIOR FILING DATE: 1998-06-12
    33 <150> PRIOR APPLICATION NUMBER: 9721357.3
    34 <151> PRIOR FILING DATE: 1997-10-08
    36 <150> PRIOR APPLICATION NUMBER: 9721358.1
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need to insert Line breaks between numeric identifiers.

ERRORED SEQUENCES

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W--> 1841 <212> TYPE:

W--> 1841 <213> ORGANISM:

37 <151> PRIOR FILING DATE: 1997-10-08

41 <170> SOFTWARE: PatentIn Ver. 2.0

E--> 39 <160> NUMBER OF SEQ ID NOS: 37

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5 10

1844 Lys Ser Val